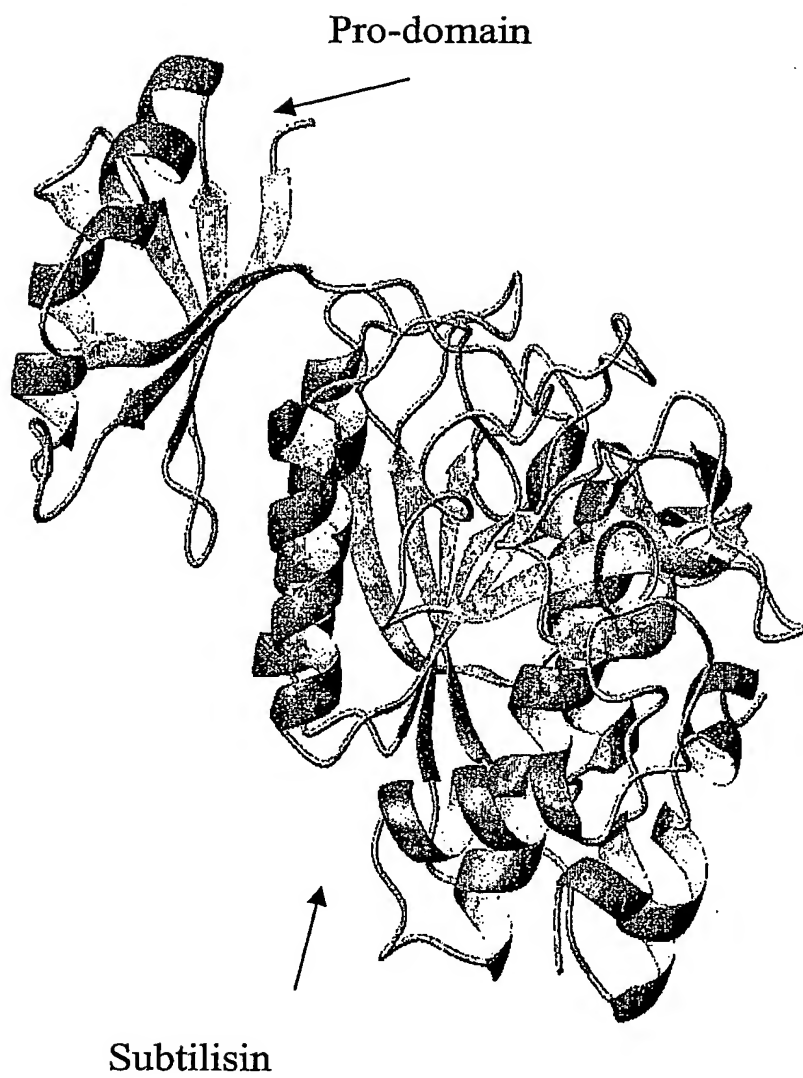


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Figure 1

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| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Gln | Ser | Val | Pro | Tyr | Gly | Val | Ser | Gln | Ile | Lys | Ala | Pro | Ala | Leu |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| His | Ser | Gln | Gly | Tyr | Thr | Gly | Ser | Asn | Val | Lys | Val | Ala | Val | Ile | Asp |
| | | 20 | | | | | 25 | | | | | | 30 | | |
| Ser | Gly | Ile | Asp | Ser | Ser | His | Pro | Asp | Leu | Lys | Val | Ala | Gly | Gly | Ala |
| | 35 | | | | | 40 | | | | | | 45 | | | |
| Ser | Met | Val | Pro | Ser | Glu | Thr | Asn | Pro | Phe | Gln | Asp | Asn | Asn | Ser | His |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Gly | Thr | His | Val | Ala | Gly | Thr | Val | Ala | Ala | Leu | Asn | Asn | Ser | Ile | Gly |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Val | Leu | Gly | Val | Ala | Pro | Ser | Ala | Ser | Leu | Tyr | Ala | Val | Lys | Val | Leu |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Gly | Ala | Asp | Gly | Ser | Gly | Gln | Tyr | Ser | Trp | Ile | Ile | Asn | Gly | Ile | Glu |
| | | 100 | | | | | | 105 | | | | | 110 | | |
| Trp | Ala | Ile | Ala | Asn | Asn | Met | Asp | Val | Ile | Asn | Met | Ser | Leu | Gly | Gly |
| | | 115 | | | | 120 | | | | | | 125 | | | |
| Pro | Ser | Gly | Ser | Ala | Ala | Leu | Lys | Ala | Ala | Val | Asp | Lys | Ala | Val | Ala |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Ser | Gly | Val | Val | Val | Val | Ala | Ala | Ala | Gly | Asn | Glu | Gly | Thr | Ser | Gly |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Ser | Ser | Ser | Thr | Val | Gly | Tyr | Pro | Gly | Lys | Tyr | Pro | Ser | Val | Ile | Ala |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Val | Gly | Ala | Val | Asp | Ser | Ser | Asn | Gln | Arg | Ala | Ser | Phe | Ser | Ser | Val |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Gly | Pro | Glu | Leu | Asp | Val | Met | Ala | Pro | Gly | Val | Ser | Ile | Gln | Ser | Thr |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| Leu | Pro | Gly | Asn | Lys | Tyr | Gly | Ala | Tyr | Asn | Gly | Thr | Ser | Met | Ala | Ser |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Pro | His | Val | Ala | Gly | Ala | Ala | Ala | Leu | Ile | Leu | Ser | Lys | His | Pro | Asn |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |
| Trp | Thr | Asn | Thr | Gln | Val | Arg | Ser | Ser | Leu | Glu | Asn | Thr | Thr | Thr | Lys |
| | | | | 245 | | | | | 250 | | | | | 255 | |
| Leu | Gly | Asp | Ser | Phe | Tyr | Tyr | Gly | Lys | Gly | Leu | Ile | Asn | Val | Gln | Ala |
| | | | 260 | | | | | 265 | | | | | 270 | | |
| Ala | Ala | Gln | | | | | | | | | | | | | |
| | | 275 | | | | | | | | | | | | | |

Figure 2

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TABLE 1

| | S149 | S160 | S188 | S189 | S190 | S191 | S193 | S194 | S196 | S197 | S198 | S199 | S201 | S202 |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Q2K | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| S3C | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| P5S | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| S9A | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| I31L | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| K43N | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| M50F | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| A73L | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 75-83 | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| E156S | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| G166S | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| G169A | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| S188P | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Q206C | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| N212G | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| K217L | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| N218S | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| T254A | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Q271E | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Y104A | | X | X | X | X | X | X | X | X | X | X | X | X | X |
| G128S | | X | X | X | X | X | X | X | X | X | X | X | X | X |
| L126I | | | | | | | | | | | | | | |
| S166G | | | | | | | X | | | | | X | X | X |
| N155L | | | X | | | | | | | | | | | |
| D32A | | | | X | | | | | | | | | X | |
| D32S | | | | | X | | | | | | | | | |
| D32V | | | | | | | | | X | | | X | | |
| D32T | | | | | | | | | | X | | | | |
| D32G | | | | | | | | | | | X | | | |
| N155Q | | | | | | X | | | | | | | | |
| S221A | | | | | | | | X | | | | | | X |

Figure 3

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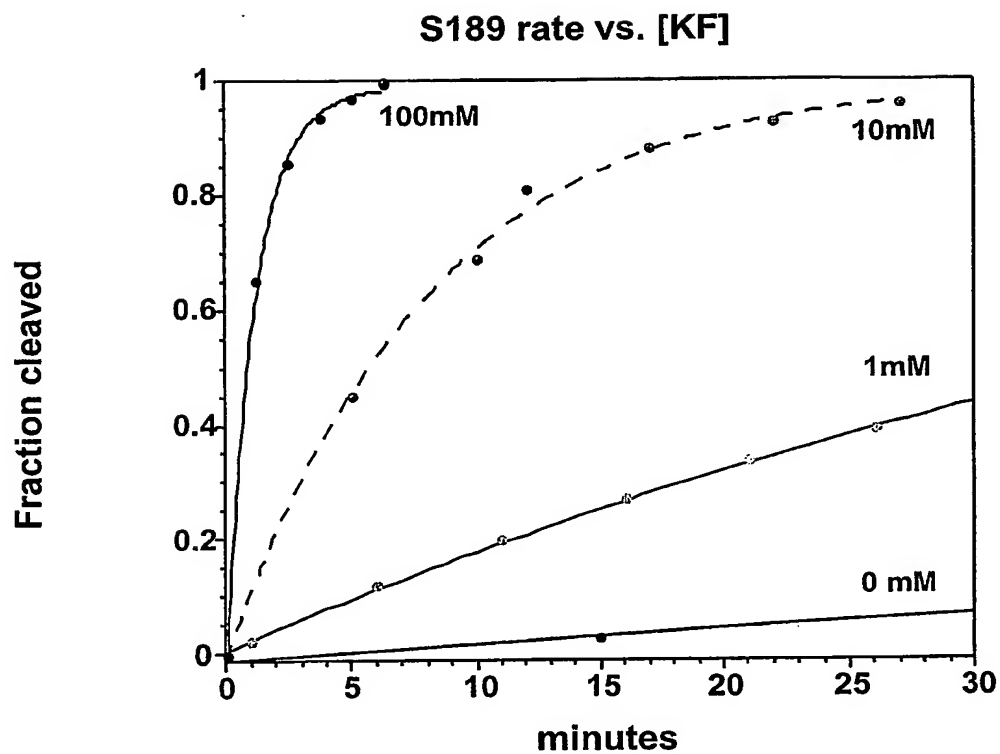


Figure 4

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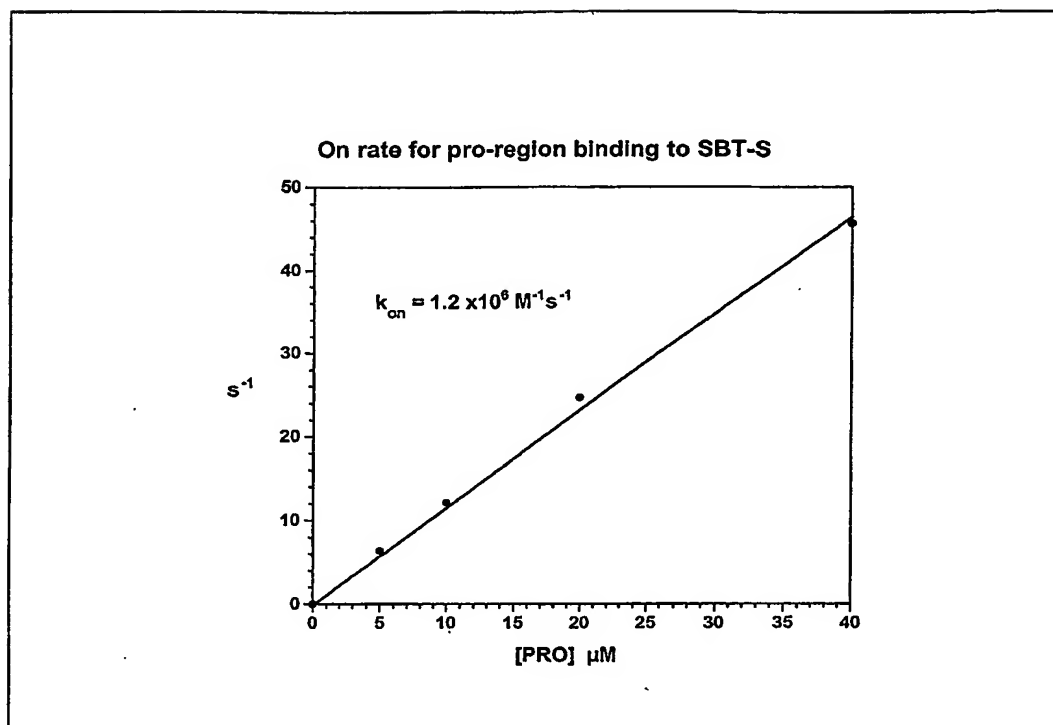


Figure 5

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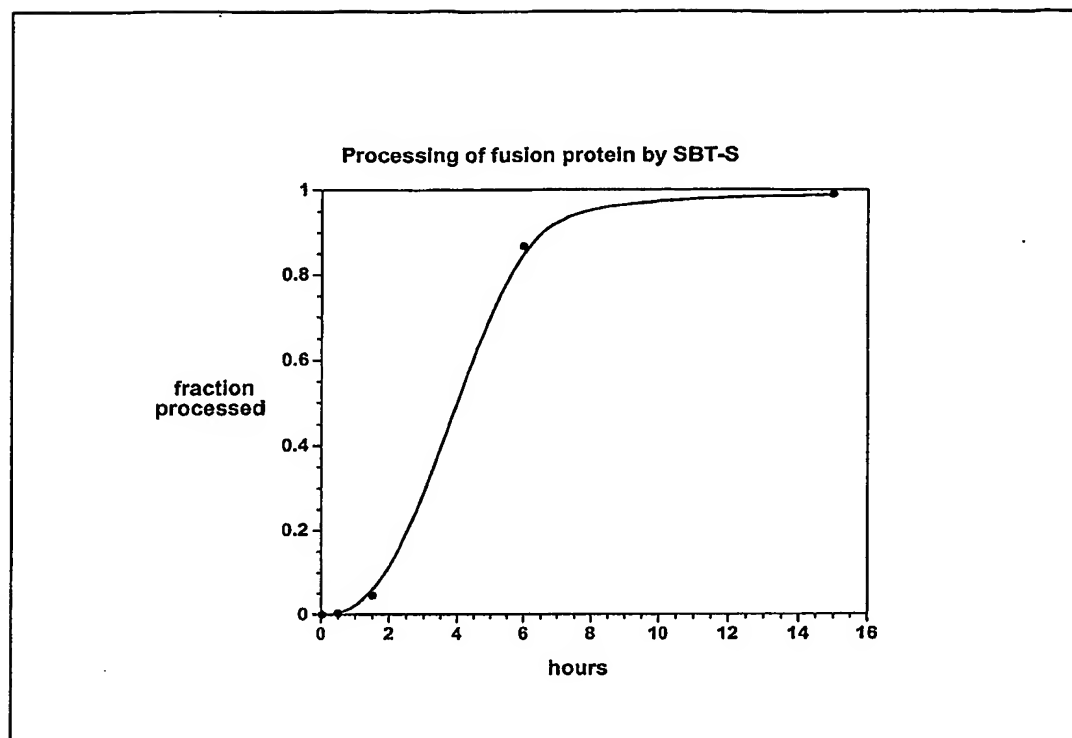


Figure 6

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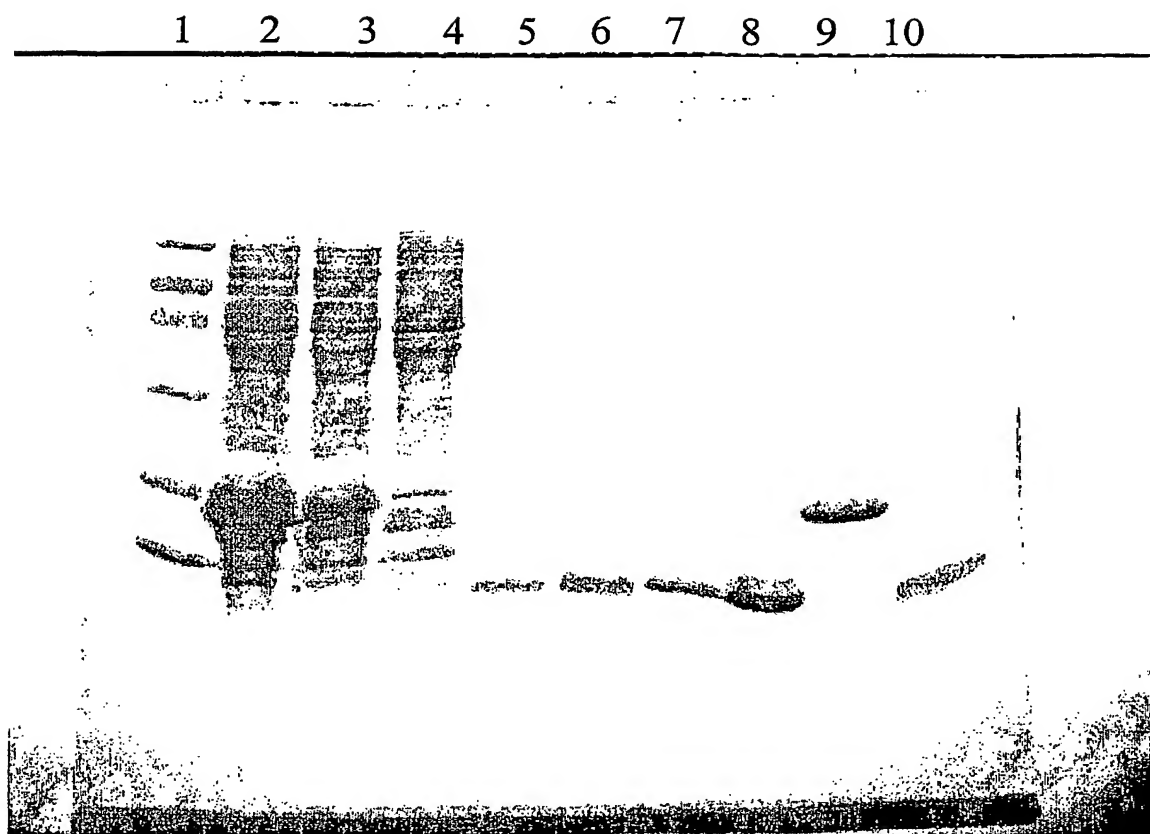


Figure 7

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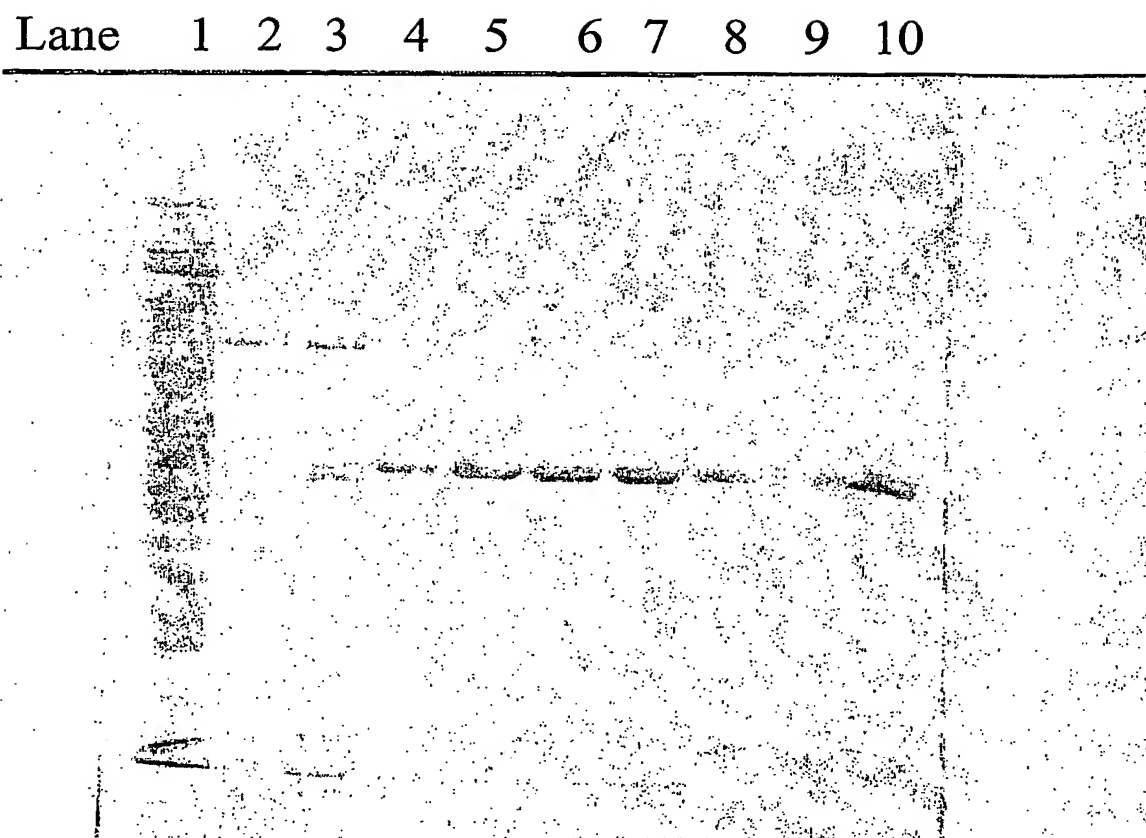
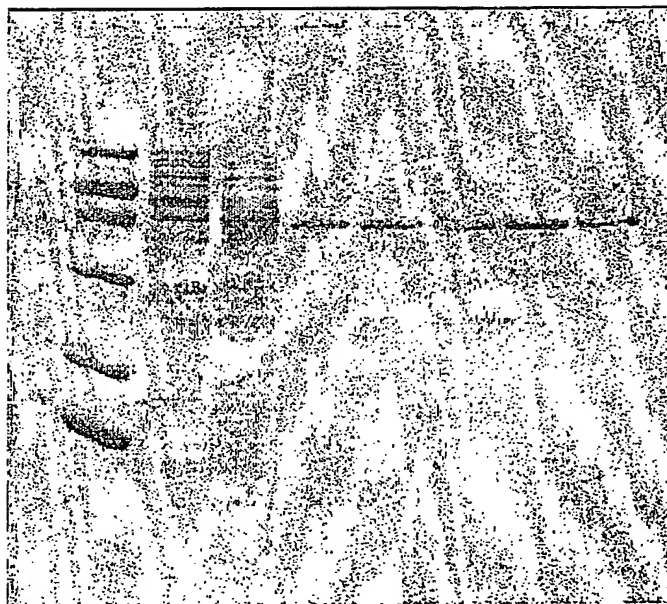


Figure 8

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CDC6



DNA replication factor
379 aa

Methanothermobacter
thermautotrophicus

Figure 9

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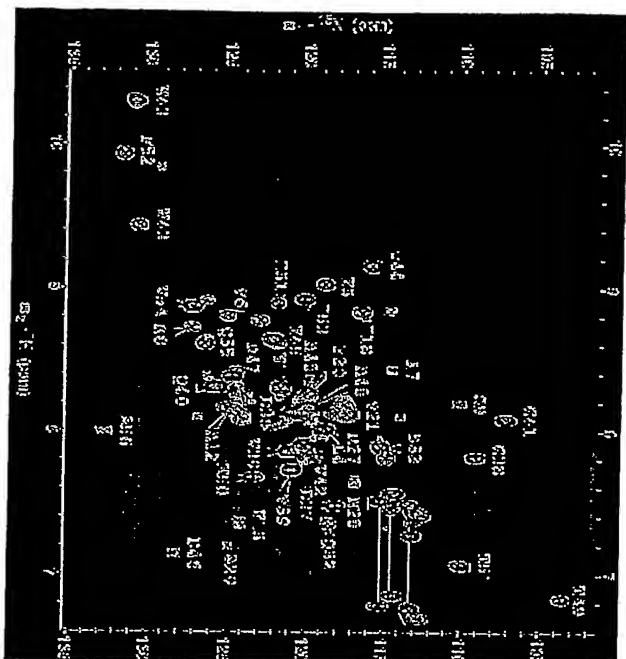


Figure 10 A

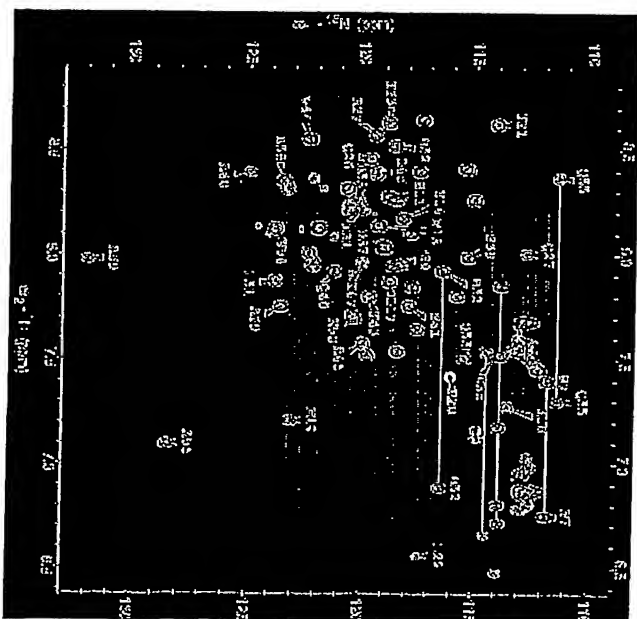


Figure 10 B

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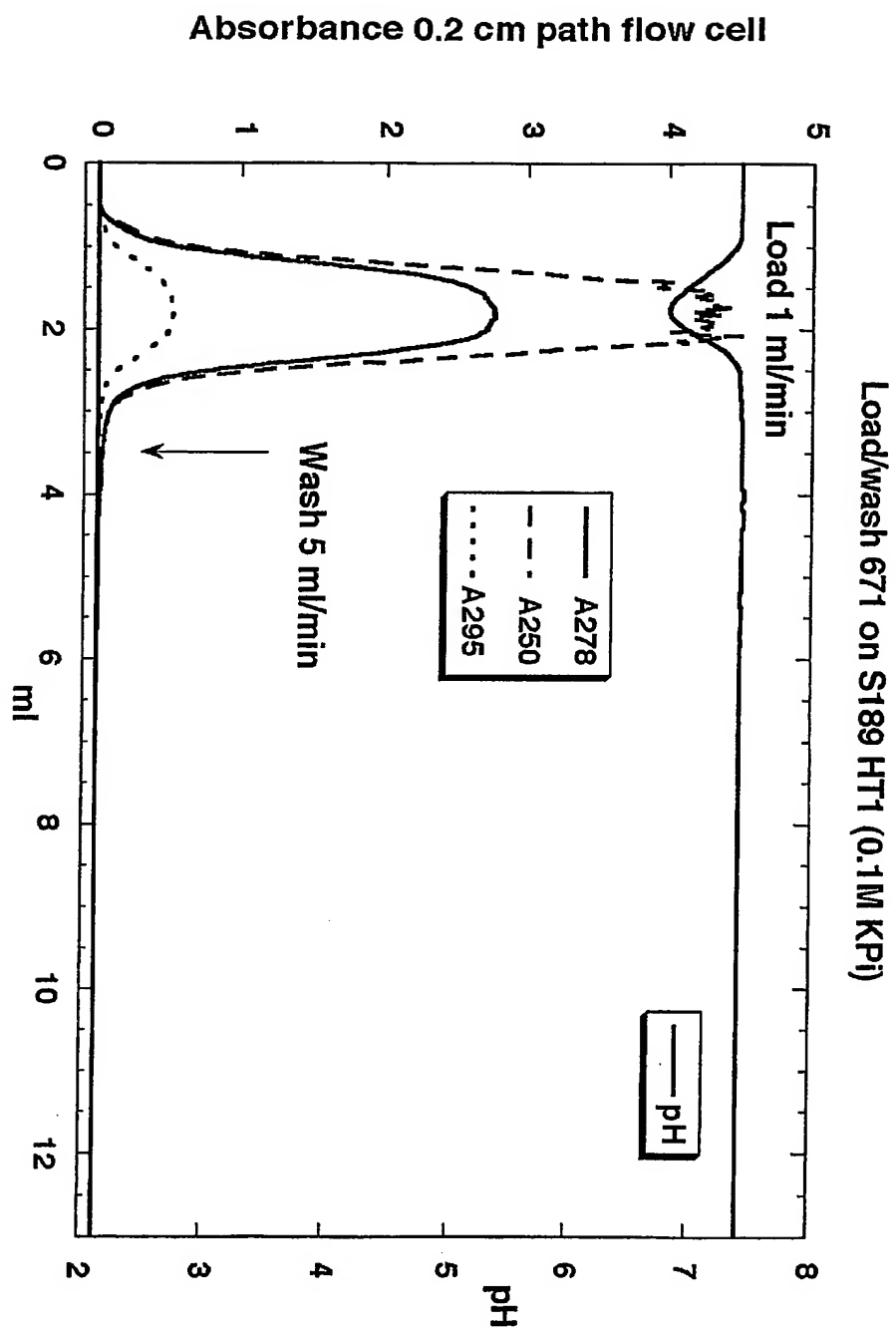


Figure 11

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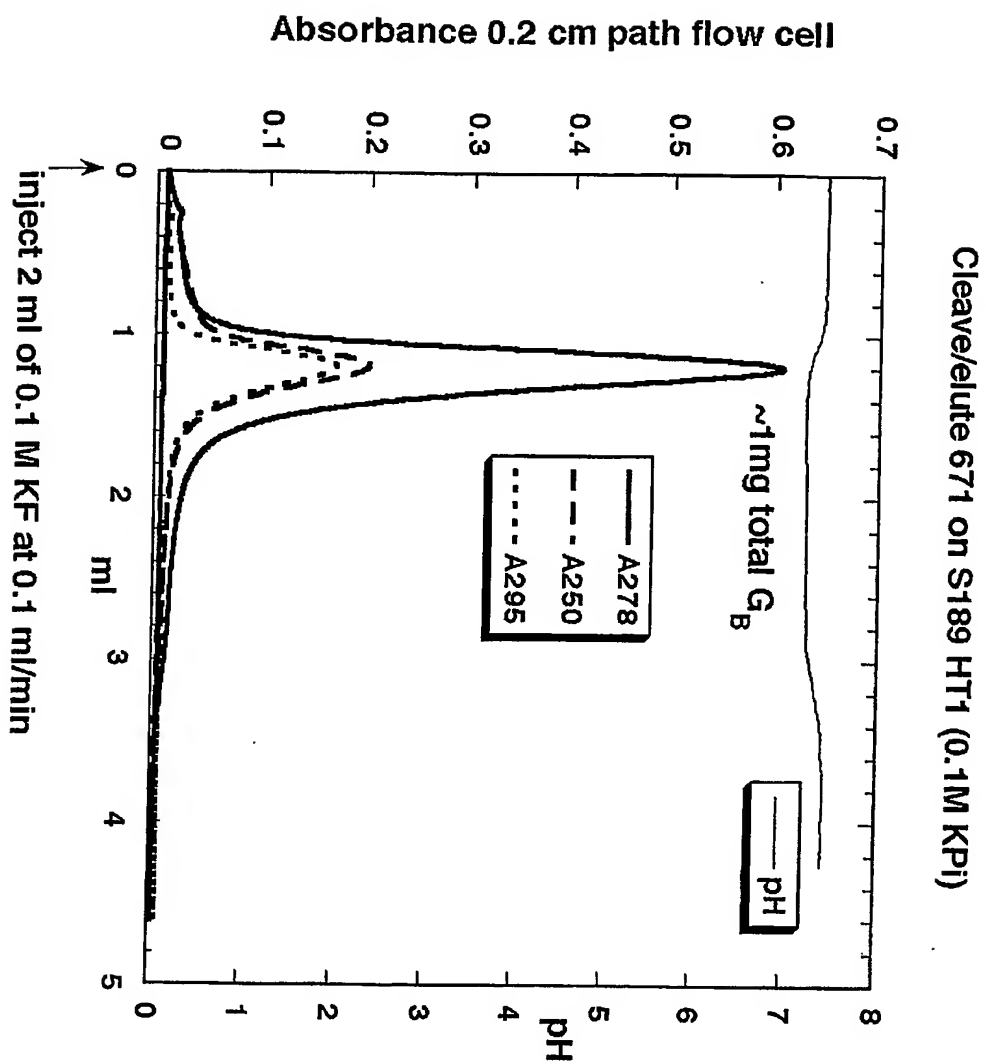


Figure 12

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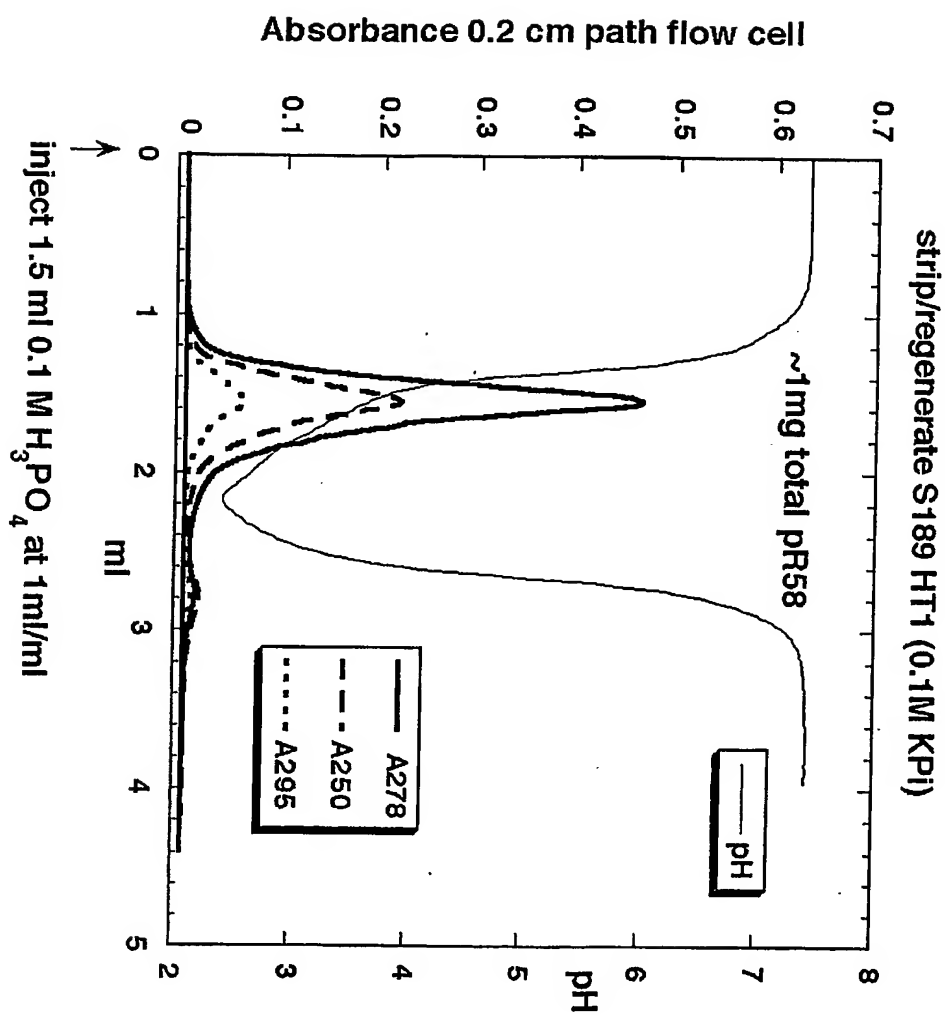


Figure 13

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Lane 1 2 3 4 5 6 7



Figure 14

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